

1       Claims

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3           1. A rotary bending tool, comprising:

4              a saddle comprised of an elongated member formed with a partially cylindrical

5              open recess extending lengthwise along said saddle;

6              a rocker comprised of an elongated member having a partially cylindrical outer

7              surface fit to said partially cylindrical portion of said saddle recess, said saddle recess to allow

8              relative rotation therein, said saddle partially encircling said rocker to capture the same;

9              said rocker having a V-shaped recess extending lengthwise along said rocker, said

10             V-shaped recess positioned to face away from said saddle recess with said cylindrical saddle

11             recess and said partially cylindrical surface of said rocker interfit together;

12             a series of pins each received in respective one of a series of holes in said saddle

13             and entering a respective one of a series of pockets formed into said cylindrical surface of said

14             rocker;

15             a spring associated with each pin holding said pin in said respective pocket of said

16             rocker;

17             a series of oil impregnated graphite plugs mounted into a surface defining said

18             saddle recess and engaging said rocker cylindrical surface, said series distributed along the length

19             of said saddle recess, lubricating said rocker cylindrical surfaces.

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21           2. The rotary bending tool according to claim 1 wherein said series of

22           graphite plugs are arranged in two side by side rows extending along said saddle recess.

1               3.     The rotary bending tool according to claim 1 wherein each of said graphite  
2     plugs have an arcuately contoured end in engagement and conforming with said rocker  
3     cylindrical surface.

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5               4.     A method of manufacturing the rotary bending tool of claim 1 including  
6     the steps of machining said rocker to form said V recess and rocker cylindrical surfaces,  
7     subsequently heat treating said rocker to harden said rocker, and thereafter reverse bending said  
8     rocker to eliminate any warpage thereof caused by said heat treating.

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